

15. The method according to claim 13 further comprising the step of isolating the nucleus of the mononuclear cell before transfer of said nucleus into the recipient.

16. The method according to claim 13 in which the mammal is an ungulate species.

17. The method according to claim 13 further comprising the step of genetically modifying the nucleus of the mononuclear cell.

18. The method according to claim 13 in which the recipient is an enucleate oocyte.

19. The method of reconstructing a mammalian embryo comprising reconstructing a first generation embryo by the steps of a method according to claim 13 and further comprising transferring a cell from the said first generation embryo to a suitable recipient to form a second generation embryo.

20. The method of reconstructing a mammalian embryo comprising reconstructing a first generation fetus by development of a first generation embryo reconstructed by a method of claim 13, preparing fetal fibroblast cultures therefrom and transferring cells from said fetal fibroblast cultures to a suitable recipient to form a second generation embryo.

21. The method according to claim 20 further comprising the step of genetic modification of the cells of the fetal fibroblast cultures prior to second generation cloning.

22. A method of preparing a mammal, the method comprising:

reconstructing a mammalian embryo using a method according to claim 13;

allowing the embryo so produced to develop to term; and

optionally breeding from the mammal so formed.

23. A method of preparing embryonic stem cell lines, comprising reconstructing a mammalian embryo using a method according to claim 13 and transferring the embryo to a culture system.

24. A method of preparing embryonic stem cell lines, comprising reconstructing a mammalian embryo using a method according to claim 13; isolating the inner cell mass of the embryo from the embryo and transferring the inner cell mass to a culture system.

25. The method according to claim 23 further comprising the step of genetic modification of the stem cells.--